

## Product datasheet

# Anti-CD20 antibody [EP459Y] ab78237

Recombinant RabMAb

★★★★★ 6 Abreviews 14 References 10 Images

### Overview

<b>Product name</b>	Anti-CD20 antibody [EP459Y]
<b>Description</b>	Rabbit monoclonal [EP459Y] to CD20
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human, Monkey
<b>Immunogen</b>	Synthetic peptide within Human CD20 aa 250 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary.
<b>Positive control</b>	IHC-P: Human B cell lymphoma tissue. Human spleen and tonsil tissue. IP: CD20 IP in Ramos whole cell lysate. WB: Ramos whole cell lysate.

### General notes

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

This product is a [recombinant rabbit monoclonal antibody](#).

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP459Y
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab78237** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
IP		1/20.
IHC-P	★★★★★	1/50 - 1/250.

**Application notes**                      Is unsuitable for Flow Cyt or ICC/IF.

## Target

**Function**                                      This protein may be involved in the regulation of B-cell activation and proliferation.

**Tissue specificity**                              Expressed on B-cells.

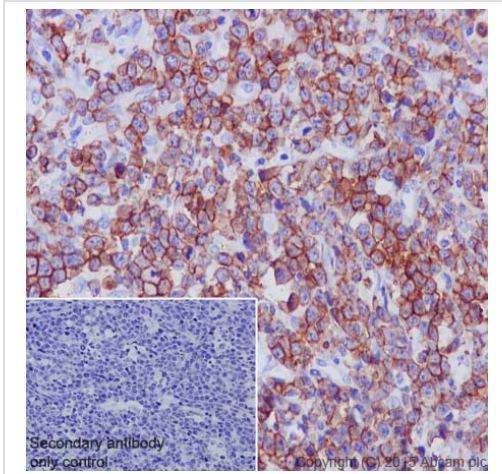
**Involvement in disease**                              Defects in MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5) [MIM:613495]; also called antibody deficiency due to CD20 defect. CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B cells is usually in the normal range, but can be low.

**Sequence similarities**                              Belongs to the MS4A family.

**Post-translational modifications**                              Phosphorylated. Might be functionally regulated by protein kinase(s).

**Cellular localization**                              Membrane.

## Images

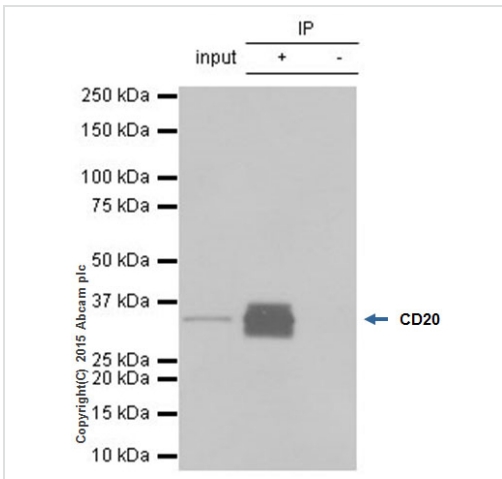


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

**Immunohistochemical staining of paraffin embedded human B cell lymphoma with purified ab78237 at a working dilution of 1/50.**

The secondary antibody used is [ab97051](#), a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counterstained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0.

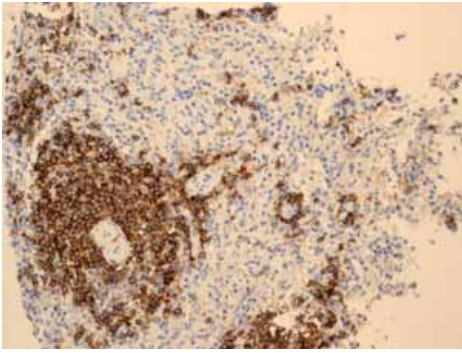
PBS was used instead of the primary antibody as the **negative control**, and is shown in the inset.



Immunoprecipitation - Anti-CD20 antibody [EP459Y] (ab78237)

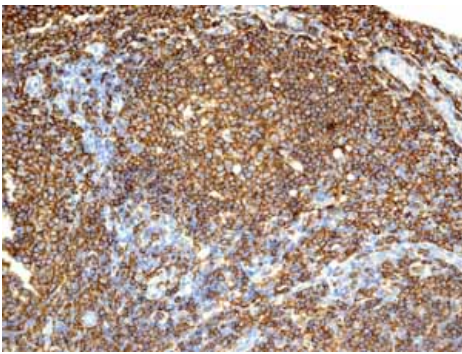
ab78237 (purified) at 1/20 immunoprecipitating CD20 in 10 µg Ramos (Human Burkitt's lymphoma cell line) cell lysate (**Lanes 1 and 2**, observed at 33 kDa). **Lane 3** - Rabbit monoclonal IgG ([ab172730](#)). For western blotting, HRP Veriblot for IP ([ab131366](#)) was used as the secondary antibody (1/10 000).

**Blocking/Dilution buffer and concentration:** 5% NFDm/TBST.



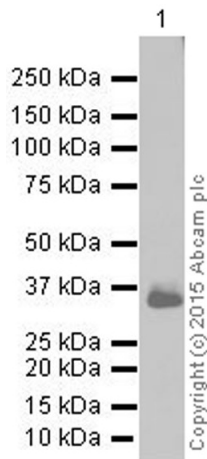
Unpurified ab78237 showing positive staining in human spleen tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)



Unpurified ab78237 showing positive staining in human tonsil tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)



Western blot - Anti-CD20 antibody [EP459Y]  
(ab78237)

Anti-CD20 antibody [EP459Y] (ab78237) at 1/10000 dilution (purified) + Raji (Human Burkitt's lymphoma cell line) whole cell lysate

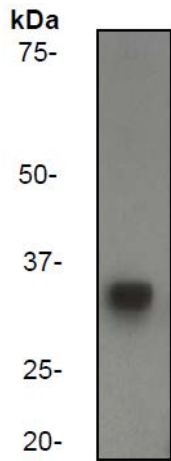
**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 33 kDa

**Observed band size:** 33 kDa

**Blocking/Dilution buffer:** 5% NFDm/TBST.

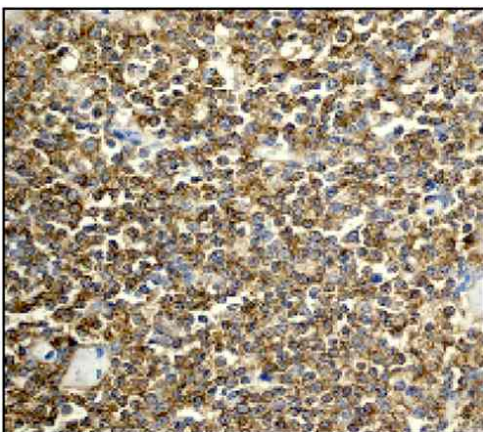


Western blot - Anti-CD20 antibody [EP459Y]  
(ab78237)

Anti-CD20 antibody [EP459Y] (ab78237) at 1/5000 dilution (unpurified) + Raji (Human Burkitt's lymphoma cell line) cell lysate

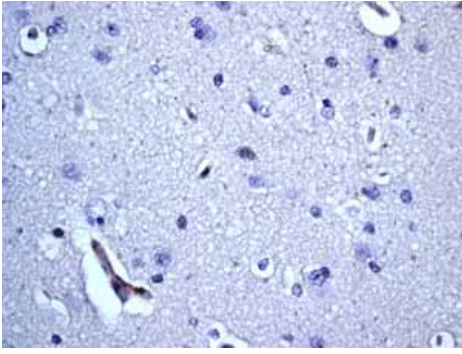
**Predicted band size:** 33 kDa

**Observed band size:** 33 kDa



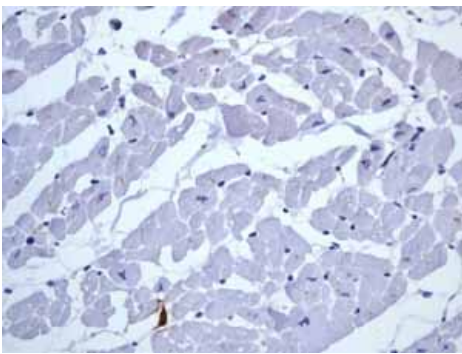
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y]  
(ab78237)

Unpurified ab78237 staining human CD20 in human lymphoma tissue by immunohistochemistry using formalin fixed, paraffin embedded tissue.



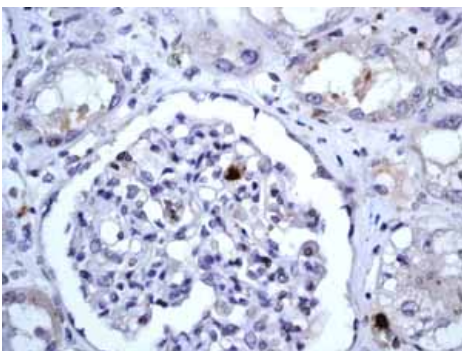
Unpurified ab78237 showing **negative staining** in human brain tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)



Unpurified ab78237 showing **negative staining** in human heart tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)



Unpurified ab78237 showing **negative staining** in human kidney tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [EP459Y] (ab78237)

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